Department for Environment Food & Rural Affairs

28th November 2019

Statistics on waste managed by local authorities in England in 2018/19

This release relates to the collection and management of waste under the possession or control of local authorities in England. It covers three principal measures as summarised in the table below.

The next update to this notice and datasets will be in November/December 2020.

What data is confirmed in this release?

Measure	Time Period
Waste from households This is the official recycling measure that is used as the basis for reporting at a harmonised UK level against the Waste Framework Directive.	First publication of figures for the 2018 calendar year and for the 2018/19 financial year.
Local authority collected waste This is all waste within the remit of local authorities. It includes household waste plus other non-household waste collected by local authorities.	First publication of figures for the 2018/19 financial year.
Household waste This is broader than 'waste from households', and includes waste from street bins, street sweepings, and parks and grounds. It does not include metals from incinerator bottom ash.	First publication of figures for the 2018/19 financial year.

For more information about what data is included in the three measures listed in the table above, please refer to the section on 'Glossary of terms and measures' and the separate methodology document.

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Key points

England Waste from Households: 2018 and 2018/19 (Table 1 and Figure 1)

- The official England 'waste from households' recycling rate was 44.7 per cent in 2018, down 0.5 percentage points from 45.2 per cent in 2017. Metal recovered and then recycled from waste that has been through incineration (IBA metal) added approximately 0.9 percentage points to the recycling rate in 2018.

- In 2018, total 'waste from households' decreased to 22.0 million tonnes, a 1.8 per cent decline from 2017, in which it was 22.4 million tonnes. This is equivalent to 394 kg per person, down from 403 kg per person in 2017, a decrease of 2.2 per cent.

- The amount of residual waste treated was 12.2 million tonnes, down from 12.3 million tonnes in 2017. This was a decrease of 0.9 per cent.

- The amount of total waste recycled also decreased. In 2018, it was 9.8 million tonnes, down from 10.1 million tonnes in 2017. This was a decrease of 3.0 per cent.

- The amount of dry material recycled was 5.9 million tonnes in 2018, down slightly (51,000 tonnes or 0.9 per cent) on 2017. The tonnage of separately collected food waste sent for recycling was 414 thousand tonnes, an increase of 7.1 per cent from 386 thousand tonnes in 2017. 'Other organic' waste sent for recycling was 3.6 million tonnes, down a more substantial 0.3 million tonnes or 7.2 per cent on 2017. This is the lowest tonnage of 'other organic' waste sent for recycling since 2013 and had a significant impact on the overall recycling rate.

- There is an EU target for the UK to recycle at least 50 per cent of waste generated by households by 2020. The 'waste from households' figures outlined here for England make a significant contribution to UK estimates, which are published in the UK Statistics on Waste.

- The rolling 12-month 'waste from households' recycling rate was 45.1% at the end of March 2019. This is an increase of 0.3 percentage points compared with the previous 12-month period. These figures include IBA metal.

England Local Authority and Household Waste: 2018/19 financial year (Table 2)

- In 2018/19, total local authority managed waste remained steady at 25.6 million tonnes.

- 10.8 per cent of all local authority waste (2.8 million tonnes) was disposed of via landfill in 2018/19. This was down 0.5 million tonnes (14.2 per cent) from 2017/18.

- Waste sent for incineration increased by 0.4 million tonnes (3.4 per cent) to 11.2 million tonnes in 2018/19 compared to 2017/18. It was the disposal method used for 43.8 per cent of all local authority waste.

- Existing definitions and methodology have been retained for all local authority and 'household waste' recycling figures; IBA metal is not included.

- 10.9 million tonnes of local authority waste was sent for recycling in 2018/19, a 0.6 per cent increase on 2017/18.

- Amongst the 345 local authorities in England, there is considerable variation in 'household waste' recycling rates, ranging from 17 to 65 per cent in 2018/19.

Datasets for the national and regional data, as well as data at local authority level—including the ex-National Indicator measures—are available at the gov.uk website.

Data Revisions

Several revisions have been made to historic data. Overall changes are minor and do not affect the national 'waste from households' recycling rate published here. For more on these changes, refer to the Data and Methodology section of this notice**.**

1.1 Waste from Households (Table 1)

'Waste from households' is the measure introduced by the UK in 2014 to provide a harmonised UK indicator for reporting recycling rates at a UK level on a calendar year basis, complying with the Waste Framework Directive (2008/98/EC). It excludes local authority collected waste not considered to have come directly from households, such as street bins, street sweepings, parks and grounds waste, and compost-like output.

For more information, refer to the Data and Methodology section of this notice**.**

Table 1: Composition breakdown and recycling rate of 'waste from households' in England, 2014 to 2018, (thousand tonnes)

Waste type	2014	2015	2016	2017	2018	% change 2018 over 2017
Total Recycling *of which:*	**10,025**	**9,849**	**10,217**	**10,139**	**9,840**	-3.0%
Dry recycling *of which:*	5,807	5,834	6,042	5,917	5,866	-0.9%
IBA Metal	:	97	143	181	187	3.2%
Separately collected food waste	290	307	355	386	414	7.1%
Other organics recycling	3,928	3,708	3,820	3,836	3,561	-7.2%
Total Residual	**12,327**	**12,363**	**12,535**	**12,266**	**12,151**	-0.9%
Total waste from households	**22,355**	**22,225**	**22,770**	**22,437**	**22,033**	-1.8%
Waste from households recycling rate (including IBA metal)	**:**	**44.3%**	**44.9%**	**45.2%**	**44.7%**	**-0.5 percentage points**
Waste from households recycling rate (excluding IBA metal)	**44.8%**	**43.9%**	**44.2%**	**44.4%**	**43.8%**	**-0.6 percentage points**

Notes
Total waste from households includes dry recycling/preparing for reuse and organics. It also includes residual waste (or 'black bag' waste) and rejects from recycling. IBA metal is included in the recycling figures from April 2015 onwards; for 2015 it is a slight underestimate as capturing IBA metal was only possible from April 2015.
Numbers may not add to exact totals. This is due to rounding.

- In 2018, the total weight of 'waste from households' in England was 22.0 million tonnes, down from 22.4 million tonnes in 2017. This was a decrease of 1.8 per cent.

- The weight of waste sent for recycling was 9.8 million tonnes in 2018, a 3.0 per cent decrease from 10.1 million tonnes in 2017.

- Residual waste was 12.2 million tonnes in 2018, down from 12.3 million tonnes in 2017. This was a decrease of 0.9 per cent.

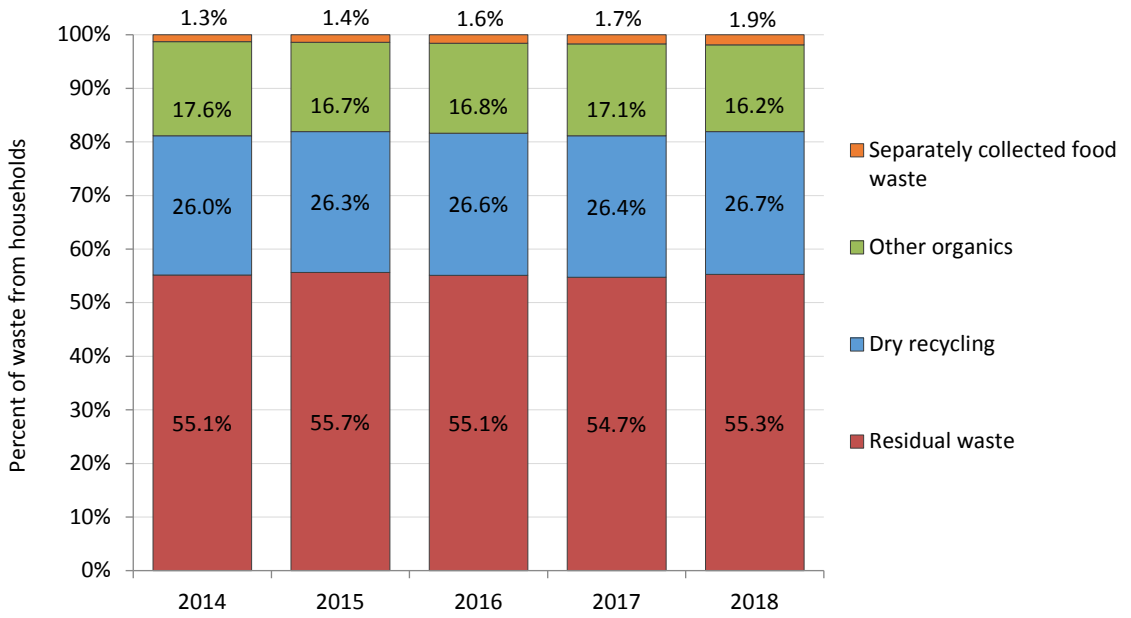
- The ‘waste from households’ recycling rate was 44.7 per cent in 2018, a decrease of 0.5 percentage points from 2017 when the rate was 45.2 per cent. Metals that had been recovered from incinerated waste and then recycled (IBA metal) contributed 187 thousand tonnes, up from 181 thousand tonnes in 2017. This was an increase of 3.2 per cent.

- When IBA metal is excluded, the ‘waste from households’ recycling rate was 43.8 per cent in 2018, a decrease of 0.6 percentage points from the 2017 rate of 44.4 per cent.

- The decrease in the recycling rate was driven by variations in the tonnage of ‘other organics’, which is linked to weather conditions. In 2018, 3.6 million tonnes of ‘other organics’ waste was sent for recycling, a decrease of 7.2 per cent from 3.8 million tonnes in 2017.

1.2 Waste from Households: Waste Streams (Figures 1 to 4)

Figure 1: Waste composition: Waste stream proportions as a percentage of total ‘waste from households’, 2014-2018, England



Notes
Residual waste includes residual ‘waste from households’ regular collections (black bags), bulky waste, residual waste from civic amenity centres, and rejects from recycling. It excludes waste diverted for recycling from residual waste.
Dry recycling includes paper and card, glass, plastic, waste electrical and electronic equipment (WEEE), scrap metals including those reclaimed from incinerator bottom ash as well as other materials.
Other organics includes green garden waste, mixed garden and food waste, wood for composting and other compostable waste.
Numbers may not add to exactly 100. This is due to rounding.

- A total of 22.0 million tonnes of ‘waste from households’ was treated in England in 2018. Of this, 55.3 per cent was residual waste, 26.7 per cent was dry recycling, 16.2 per cent was ‘other organics’—including green garden waste and mixed garden and food waste—and 1.9 per cent was separately collected food waste.

- The tonnage of dry recycling, which includes paper and card, glass, plastic, waste electrical and electronic equipment (WEEE), and scrap metals including those reclaimed from incinerator bottom ash as well as other materials declined slightly (by 0.9 per cent), but remained at around 5.9 million tonnes. As a proportion of total ‘waste from households’, it increased to 26.7 per cent in 2018 from 26.4 per cent in 2017.

- Separately collected food waste rose by 7.1 per cent to 414 thousand tonnes in 2018 compared to 2017. However, it remained only a small proportion of total ‘waste from households,’ at 1.9 per cent.

- The weight of ‘other organic’ waste—including garden waste, mixed garden and food waste, wood for composting and other compostable waste—accounted for 16.2 per cent of total ‘waste from households’. The tonnage decreased by 0.3 million tonnes (7.2 per cent) to 3.6 million tonnes in 2018. This is similar to the tonnage of ‘other organic’ waste sent for recycling in 2013 and 2010; in all other years the tonnage has ranged from 3.7 to 3.9 million tonnes. The lower tonnage of ‘other organic’ waste in 2018 has the impact of reducing the overall recycling rate by around 1 percentage point.

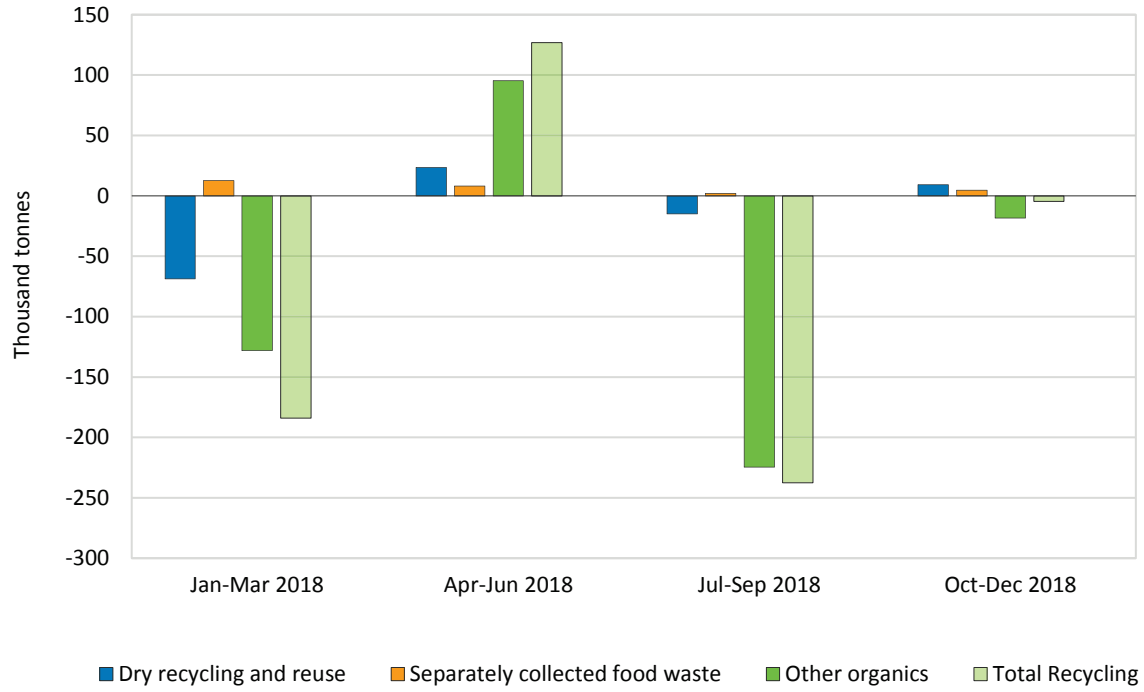
- The majority (59.6 per cent) of ‘waste from households’ recycling in 2018 was dry recyclate.

- As a proportion of total recycling, separately collected food waste comprised 4.2 per cent. This was an increase of 0.4 percentage points from 2017. This continues the longer trend for incremental increases each year, from 1.3 per cent in 2010.

- As a proportion of total recycling, ‘other organics’ comprised 36.2 per cent, a decrease of 1.6 percentage points from 2017. Between 2010 and 2017, ‘other organics’ ranged from 37.4 to 39.3 per cent (an average of 38.3 per cent). Levels for 2018 are considerably lower than this observed average.

- Organic waste tonnages are linked to the season and variations in weather. Figure 2, which shows quarterly changes in the total tonnage of ‘waste from households’ collected in England from 2017 to 2018, also shows the quarterly variation in ‘other organic’ waste.

Figure 2: Quarterly year on year change in weight of recycled 'waste from households', 2018 compared to 2017, England (thousand tonnes)



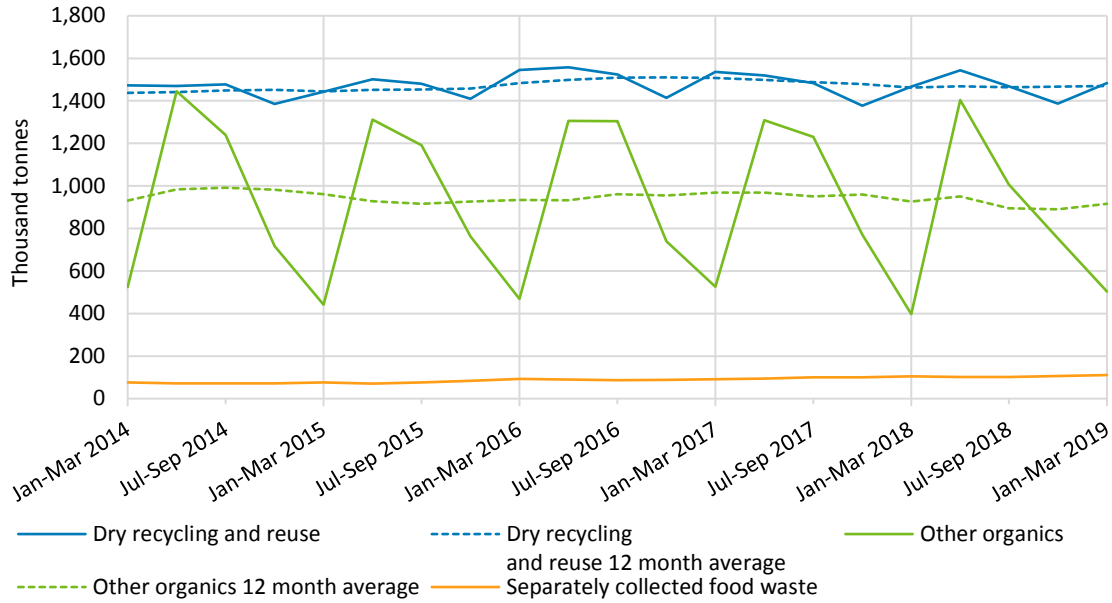
- Comparative to the same periods in 2017, the tonnage of 'other organic' 'waste from households' decreased by 24.4 per cent in January to March, by 18.2 per cent in July to September, and to a much lesser extent, October to December 2018. It increased by 7.3 per cent in April to June 2018. The comparatively lower tonnage in January to March 2018 may have been due to a prolonged cold spell. The lower tonnage in July to September 2018 was due to the hot, dry weather, which followed more optimal growing conditions in April to June.

- The change in dry recycling was less significant. The majority of the change occurred in January to March when there was a 4.5 per cent decline in tonnage recycled compared to this same period in 2017. The amount of separately collected food waste sent for recycling increased in all quarters.

Quarterly trends over a longer time period from January to March 2014, are shown in Figures 3 and 4, which incorporate the data for the latest quarter, January to March 2019, as well. Figure 4 shows quarterly dry and organic recycling as a proportion of total 'waste from households' and a smoothed 12-month rolling average for the overall recycling rate.

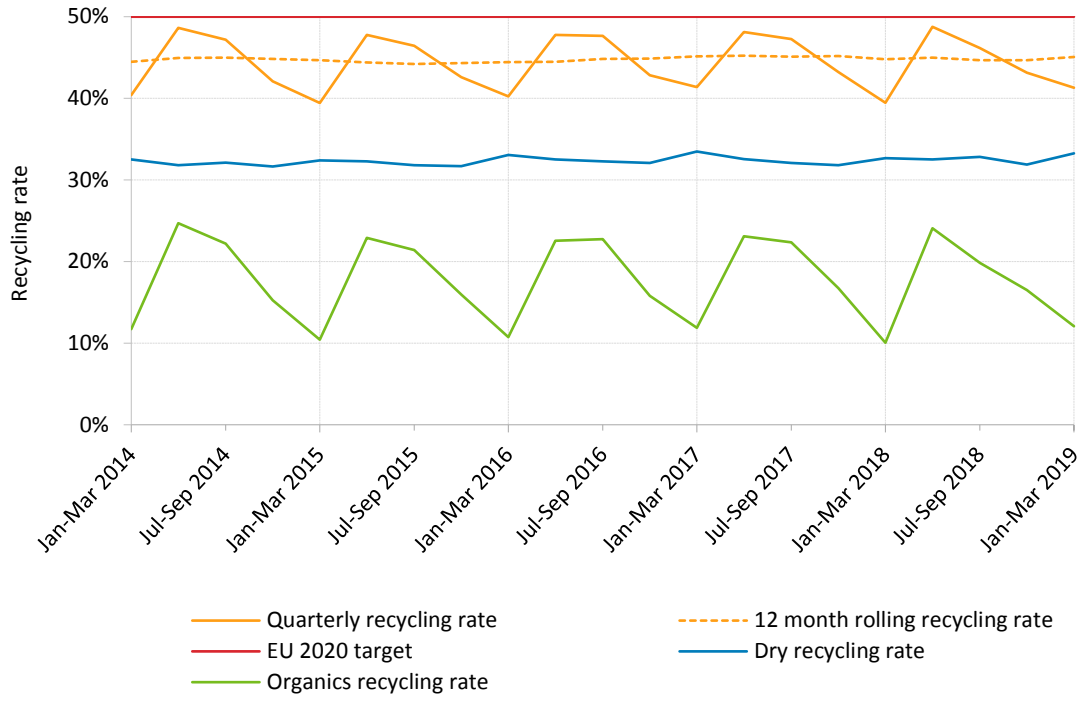
The smoothed 12-month rolling average 'waste from households' recycling rate has ranged from 44.2 to 45.2 per cent over this time period.

Figure 3: ‘Waste from households’ quarterly recycling volumes by waste type, England, with 12 month moving averages (thousand tonnes)



Notes
Dry recycling includes paper and card, glass, plastic, waste electrical and electronic equipment (WEEE), scrap metals including those reclaimed from incinerator bottom ash as well as other materials.
Other organics includes green garden waste, mixed garden and food waste, wood for composting and other compostable waste.

Figure 4: ‘Waste from households’ quarterly recycling rate, England, Jan-Mar 2014 to Jan-Mar 2019



Notes
Recycling is ‘recycling, composting, and preparing for reuse.’

1.3 Waste from Households: Dry Recycling Composition (Figures 5 and 6)

- Dry recycling including IBA metals remained at 5.9 million tonnes. It made up 26.7 per cent of total 'waste from households' and 59.6 per cent of all 'waste from households' recycling in 2018.

- In 2018, several dry recycling material groups showed an increase in tonnage compared to 2017, including glass (an increase of 39 thousand tonnes or 3.3 per cent), plastic (an increase of 5 thousand tonnes or 1.1 per cent), and IBA metals (an increase of 6 thousand tonnes or 3.2 per cent).

- Other dry recycling material groups showed a decrease in tonnage such as paper and card (a decrease of 91 thousand tonnes or 4.1 per cent), WEEE and other scrap metals (a decrease of 19 thousand tonnes or 3.2 per cent), and metals (a decrease of 2 thousand tonnes or 0.6 per cent).

- The largest changes in tonnages were seen in paper and card, glass, WEEE and other scrap metal, other materials, and IBA metals.

The relative proportions of the materials that made up dry recycling in 2018 are shown in Figure 5.

Figure 5: 'Waste from households' dry recycling composition, England, 2018

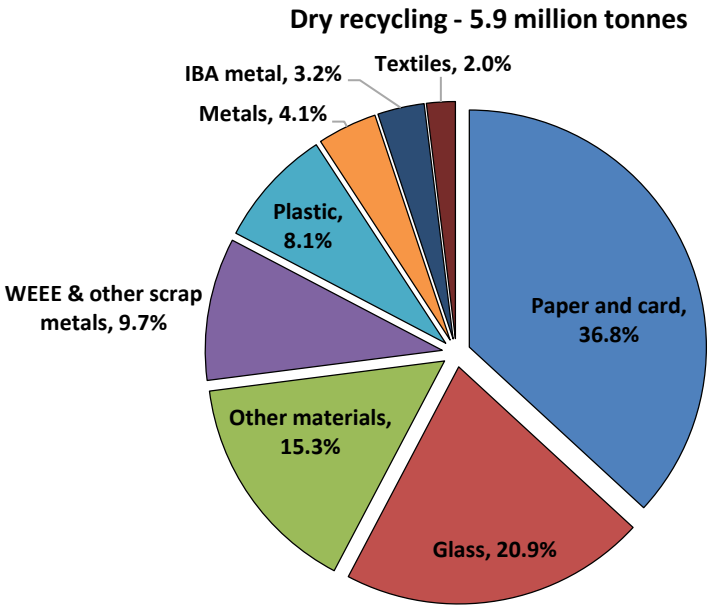
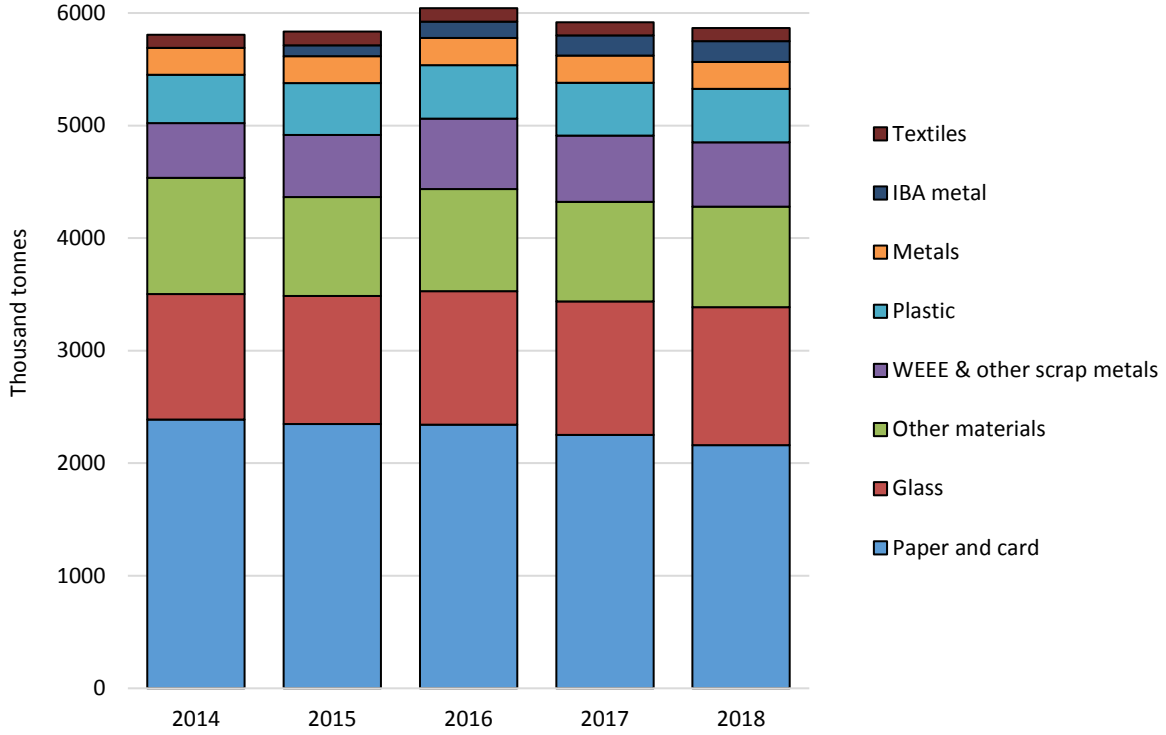


Figure 6 shows the England ‘waste from households’ dry recycling composition from 2014 to 2018.

Figure 6: ‘Waste from households’ dry recycling composition, England, 2014 to 2018 (thousand tonnes)



Notes
Other materials includes batteries (both automotive and post-consumer), bric-a-brac, chipboard and MDF, composite food and beverage cartons, composite wood materials, fire extinguishers, furniture, ink and toner cartridges, mattresses, mineral oil, paint, tyres (car, large vehicle, van and mixed tyres), vegetable oil, video tapes, DVDs and CDs, wood, and other.

- Despite some variations in tonnages, the relative proportions of materials have not substantially changed over the last five years. Notable exceptions are paper and card, which has gradually decreased and, in 2018, accounted for 36.8 per cent of dry recycling compared to 41.1 per cent in 2014 so declined by 4.3 percentage points over this period and down from 44.9 per cent in 2010. Since 2014, the proportion of glass has increased by 1.7 percentage points, WEEE and other scrap metal has increased by 1.3 percentage points and plastic by 0.7 percentage points.

- The proportion of IBA metal was 3.2 per cent in 2018, a 1.5 percentage point increase since 2015—the first year that data was available—when it contributed 1.7 per cent to dry recycling.

2.1 Waste from Households – Financial Year Figures

- In 2018/19, the total weight of 'waste from households' in England was 22.1 million tonnes, down 0.5 per cent from 22.2 million tonnes in 2017/18.

- The amount of 'waste from households' sent to recycling remained relatively stable at 10.0 million tonnes, with only a slight increase of 0.1 per cent when compared to 2017/18.

- The 'waste from households' recycling rate was 45.1 per cent in 2018/19, an increase of 0.3 percentage points on the 2017/18 recycling rate, which was 44.8 per cent.

- Dry recycling was 5.9 million tonnes in 2018/19, a slight increase of 0.6 per cent from 5.8 million tonnes in 2017/18. Organic recycling, on the other hand, decreased slightly by 0.5 per cent, remaining at 4.1 million tonnes. This decrease was mainly due to a sharp decline in the amount of 'other organics' recycled in July to September 2018, which was down 16.7 per cent compared to the same period in 2017. This was due to the hot, dry weather experienced in this period, which stunted plant growth.

- The tonnage of residual waste in 2018/19 was 1.1 per cent less than in 2017/18, down to 12.1 million tonnes. As a proportion of 'waste from households', it decreased by 0.4 percentage points to contribute 54.7 per cent.

3.1 Management of All Local Authority Collected Waste, 2018/19 (Table 2 and Figure 7)

Local authority collected waste consists of all 'waste from households', street sweepings, municipal parks and gardens waste, beach cleansing waste, and waste resulting from the clearance of fly-tipped materials plus some commercial and/or industrial waste. For further information, see the definition of terms on gov.uk.

As a result of extra granularity of data reported through Q100, it is not appropriate when referring to the management of waste for landfill, incineration or recovery to compare the data for April 2015 onwards too closely to any of the previous annual data. In particular, Q100 allows for more extensive reporting of refuse derived fuel (RDF), incineration, and outputs from incineration.

- Total local authority managed waste in 2018/19 was 25.6 million tonnes, down 40 thousand tonnes (0.2 per cent) from 2017/18.

- 10.8 per cent of all local authority collected waste was sent to landfill in 2018/19. This was a total of 2.8 million tonnes, a reduction of 0.5 million tonnes (14.2 per cent) from 2017/18. Of this, 2.1 million tonnes (76.2 per cent)

was sent direct to landfill. This is a 0.9 percentage point decrease on 2017/18, in which 77.1 per cent (2.5 million tonnes) of all local authority collected waste that was sent to landfill was sent directly.

- 43.8 per cent of all local authority waste was incinerated[1] in 2018/19, a total of 11.2 million tonnes, an increase of 0.4 million tonnes (3.3 per cent) from 2017/18, off-setting reductions in waste going to landfill. Of this, 7.8 million tonnes (69.3 per cent) was sent direct to incineration. This is a 0.8 percentage point decrease on 2017/18, in which 70.1 per cent (7.6 million tonnes) of all local authority collected waste that was sent to incineration was sent directly.

- The amount of local authority collected waste sent for recycling in 2018/19 was 10.9 million tonnes, up 66 thousand tonnes from 2017/18. Waste sent for recycling comprised 42.7 per cent of all local authority waste, an increase of 0.3 percentage points from 2017/18.

- Table 2 shows the tonnage of local authority collected waste sent to landfill, incineration, or recycling for the past five years. Figure 7 shows the management of local authority collected waste since 2000/01.

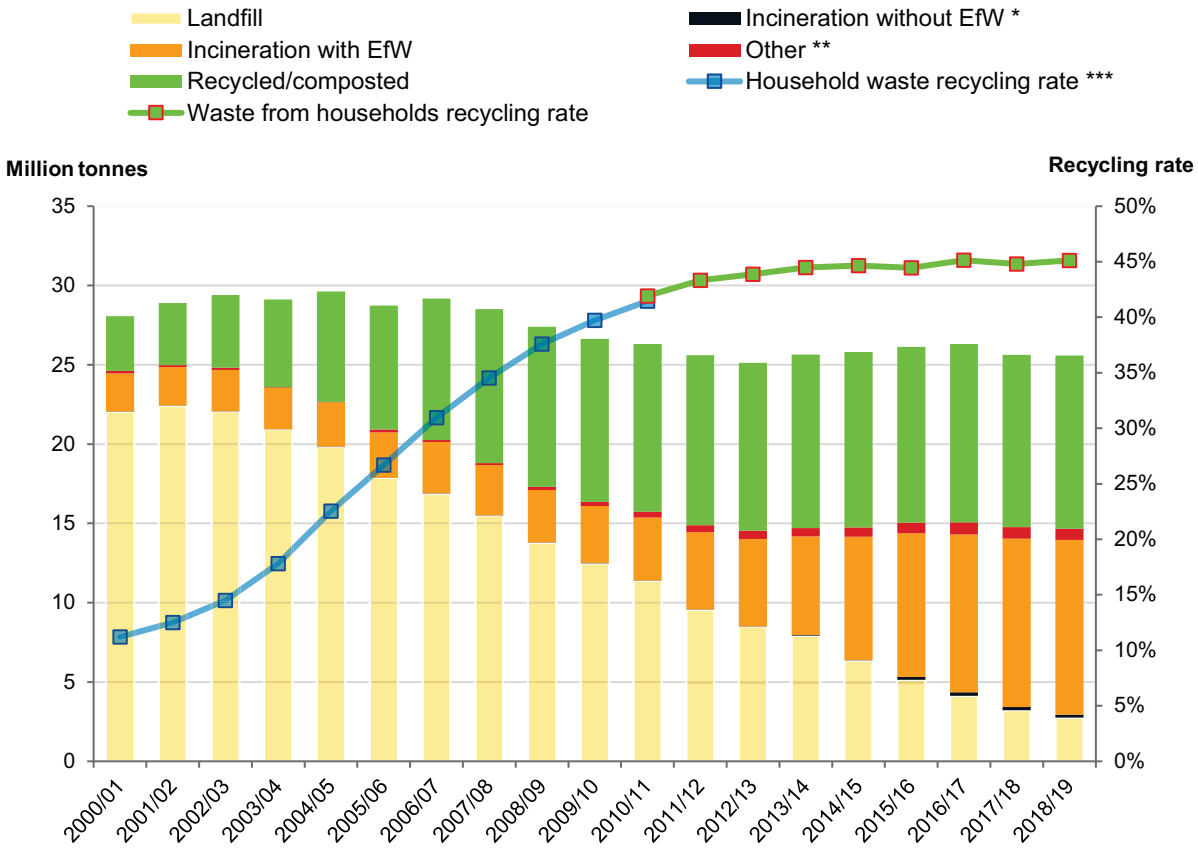
Table 2: Management of all Local Authority collected waste financial year figures, England, 2014/15 to 2018/19 (thousand tonnes)

Waste disposal method	2014/15	2015/16	2016/17	2017/18	2018/19	2018/19 % change over 2017/18
Landfill	6,361	5,133	4,136	3,213	2,756	-14.2%
Recycled/composted *of which:-*	11,067	11,065	11,252	10,860	10,926	0.6%
Household waste	10,117	10,075	10,329	9,980	10,007	0.3%
Non household waste	950	990	923	880	919	4.4%
Total incineration *of which:-*	7,798	9,259	10,182	10,847	11,205	3.3%
Incineration with EfW	7,773	9,067	9,958	10,632	11,031	3.8%
Incineration without EfW[1]	25	192	224	214	174	-19.0%
Other	589	668	748	706	699	-1.0%
Total local authority waste managed	**25,816**	**26,124**	**26,319**	**25,626**	**25,586**	**-0.2%**
Recycled/composted waste as percentage of total	**42.9%**	**42.4%**	**42.8%**	**42.4%**	**42.7%**	**0.3 percentage points**

Notes
Incineration with energy recovery/without energy recovery includes incineration bottom ash (IBA) and metals from IBA.
Numbers may not add to exact totals. This is due to rounding.

[1] Incineration with energy recovery/without energy recovery includes incineration bottom ash (IBA) and metals from IBA.

Figure 7: Management of all local authority collected waste and recycling rates, England, 2000/01 – 2018/19



Notes
* **Incineration with energy recover/without energy recovery** includes incinerator bottom ash (IBA) and metals from IBA. This is consistent with the existing definition for household waste recycling so is not impacted by the change in 'waste from households' recycling definition.
** **Other** includes waste treated/disposed of through other unspecified methods as well as process and moisture loss.
*** **The Household waste recycling rate** is based on a broader measure of waste and is not directly comparable to the 'waste from households' recycling rate. For further information on definitions, refer to the glossary.
IBA metals are included within the 'waste from households' recycling rate shown on this chart from April 2015/16 onwards but is not included in household waste recycling.

4 England and the Regions: 'Household Waste' Recycling Rates and Local Authority Collected Waste Destinations

4.1 Household Waste Recycling Rates for England and the Regions (Figure 8)

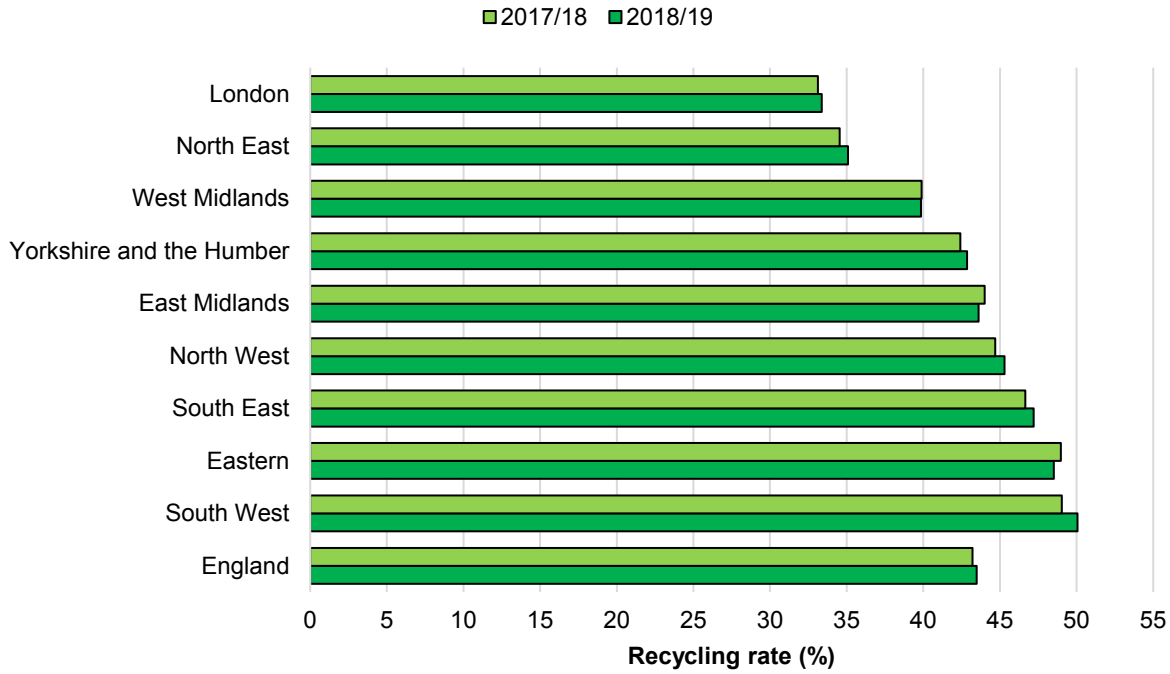
The 'household waste' (ex-NI 192) measure is a broader definition of waste than the 'waste from households' measure. It includes street bins, street sweepings, gully-emptying, parks and grounds waste, soil, and compost-like output, as well as separately collected healthcare waste and asbestos. It does not include IBA metals.

At a regional level, there is considerable variation across authorities, influenced by how heavily populated an area is, the kind of housing present, and the level of other

organic or garden waste collected. As an example, in built-up areas with a higher proportion of flats, residents may find it difficult or otherwise be unwilling to store waste for recycling; and will not be producing organic or garden waste for collection. This will reduce recycling rates for these authorities. Similarly, authorities with higher recycling rates are likely to be advantaged by good householder response to recycling schemes and a higher tonnage of organic or garden waste being collected.

Regional differences are illustrated in Figure 8.

Figure 8: 'Household waste' recycling rates, England and regions, 2017/18 and 2018/19



- London had the lowest 'household waste' recycling rate in 2018/19 at 33.4 per cent. The region with the highest 'household waste' recycling rate in 2018/19 was the South West at 50.1 per cent.

- The region with the largest increase in their 'household waste' recycling rate was the South West, with an increase of 1.1 percentage points. The North West, North East, South East, London, and Yorkshire and the Humber all had very modest increases in their recycling rates (ranging from 0.3 to 0.6 percentage points). The East Midlands and Eastern region both had marginal decreases in their 'household waste' recycling rates of 0.4 and 0.5 percentage points respectively.

4.2 Local Authority Collected Waste Final Destinations for England and the Regions (Table 3 and Figure 9)

- There are regional differences in the management of local authority collected waste, as shown in Table 3 and Figure 9.

Table 3: Management of all local authority collected waste, England by region, 2018/19 (thousand tonnes)

Region	Landfill		Incineration*		Recycled/ Composted**		Other***		Total
	Thousand tonnes	% of total	Thousand tonnes	% of total	Thousand tonnes	% of total	Thousand tonnes	% of total	Thousand tonnes
East Midlands	375	16.2	885	38.4	1,002	43.4	46	4.8	2,308
Eastern	406	14.0	965	33.4	1,380	47.8	138	2.4	2,889
London	251	6.9	2,154	59.3	1,096	30.2	128	3.5	3,629
North East	92	7.1	702	54.5	469	36.4	24	1.6	1,286
North West	441	12.6	1,337	38.3	1,586	45.5	124	2.0	3,488
South East	357	8.6	1,766	42.4	1,978	47.5	65	3.0	4,165
South West	499	19.3	737	28.4	1,295	49.9	63	1.9	2,593
West Midlands	198	7.2	1,444	52.3	1,079	39.1	37	1.4	2,758
Yorkshire and the Humber	138	5.6	1,216	49.3	1,040	42.1	74	3.5	2,469
England	**2,756**	**10.8**	**11,205**	**43.8**	**10,926**	**42.7**	**699**	**2.7**	**25,586**

Notes

*** Incineration includes incineration with energy recover/without energy recovery**. This includes incinerator bottom ash (IBA) and metals from IBA.

**** Recycled/Composted** refers to the proportion of local authority collected waste sent for recycling/composting.

***** Other** includes waste treated/disposed of through other unspecified methods as well as process and moisture loss.

Numbers may not add to exact totals. This is due to rounding.

- The South East managed the largest tonnage of local authority collected waste in 2018/19 at 4.2 million tonnes. This was 16.3 per cent of all local authority collected waste in England. The North East managed the smallest tonnage in 2018/19 at 1.3 million tonnes, or 5.0 per cent of the total for England.

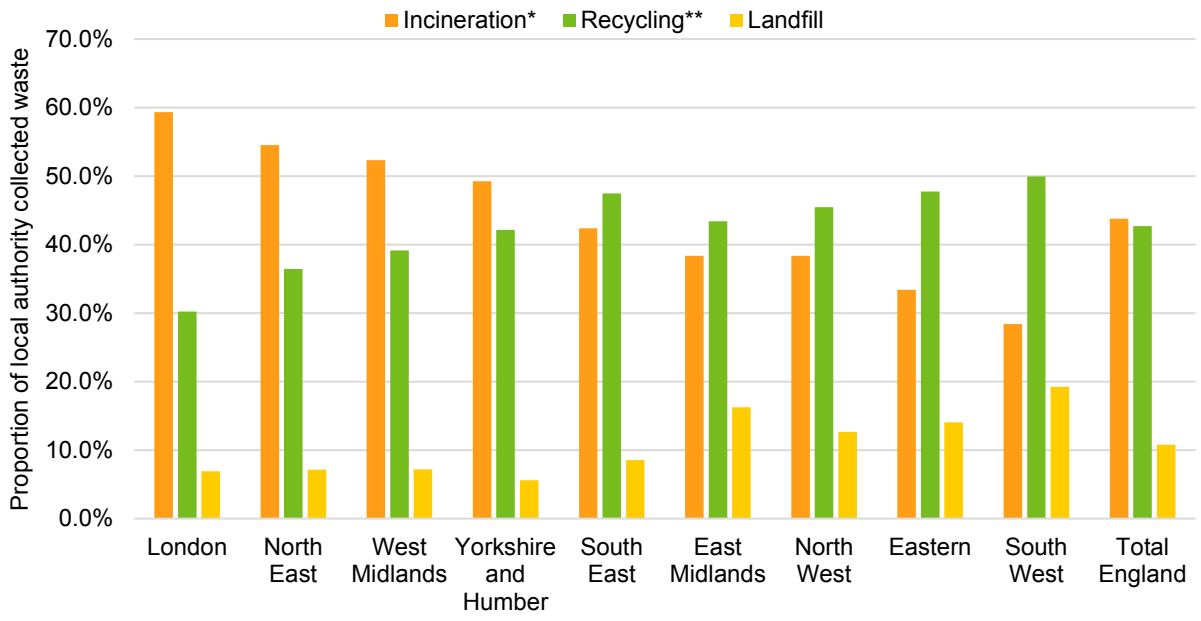
- The South West sent the largest proportion of their total local authority collected waste to landfill at 19.3 per cent (0.5 million tonnes). Yorkshire and the Humber sent the smallest proportion at 5.6 per cent. At a national level, 10.8 per cent of all local authority collected waste in England was sent to landfill in 2018/19. This was 2.8 million tonnes.

- London sent the largest proportion of total local authority collected waste to incineration in 2018/19 at 59.3 per cent (2.2 million tonnes). The South West sent the smallest proportion at 28.4 per cent. Overall, 43.8 per cent of all local

authority collected waste in England was sent to incineration in 2018/19. This was 11.2 million tonnes.

- In England, 10.9 million tonnes (42.7 per cent) of local authority collected waste was sent for recycling in 2018/19. The region that sent the largest proportion of local authority collected waste to recycling was the South West, which sent 1.3 million tonnes (49.9 per cent). The region that sent the smallest proportion of waste to recycling was London, which sent 1.1 million tonnes (30.2 per cent).

Figure 9: Management of all local authority collected waste, England by region, 2018/19 (proportions of total local authority collected waste)



Notes
*** Incineration includes incineration with energy recover/without energy recovery**. This includes incinerator bottom ash (IBA) and metals from IBA.
**** Recycling** refers to the proportion of local authority collected waste sent for recycling/composting.

5 Household Waste Recycling Rates for Individual Local Authorities (Tables 4 and 5)

- At an individual local authority level, 'household waste' recycling rates ranged from 17 per cent to 65 per cent. The overall average figure for England was 43.5 per cent, a 0.3 percentage point increase from 2017/18.

- 'Household waste' recycling is often similar in adjacent authorities, though there is a wide range between the highest and lowest recycling rates in all regions of England and even within a region. Figure 10 shows the geographic distribution of 'household waste' recycling rates in 2018/19.

- Table 4 shows the authorities with the highest and lowest recycling rates in each region as well as the proportion of their total recycling that consists of organic waste. Generally, an authority in which a smaller proportion of their total recycling is accounted for by organic waste will have a lower recycling rate, though this is not always the case (for example, Stockton-on-Tees Borough Council and County Durham in the North East).

Table 4: Local authorities with the highest and lowest household recycling rates in each region in 2018/19

Region	Position	Authority	Recycling Rate	Percent of Total Recycling that is Organic
London	lowest	Newham LB	17%	23%
	highest	Bexley LB	54%	42%
North East	lowest	Stockton-on-Tees Borough Council	26%	35%
	highest	County Durham	42%	31%
West Midlands	lowest	Birmingham City Council	22%	37%
	highest	Stratford-on-Avon District Council	60%	60%
South West	lowest	Exeter City Council	27%	31%
	highest	Stroud District Council	60%	42%
Yorkshire and the Humber	lowest	Kirklees MBC	24%	39%
	highest	East Riding of Yorkshire Council	65%	49%
East Midlands	lowest	Bassetlaw District Council	25%	31%
	highest	Derbyshire Dales District Council	60%	55%
North West	lowest	Barrow-in-Furness Borough Council	19%	41%
	highest	Cheshire West and Chester	59%	49%
South East	lowest	Slough Borough Council	23%	42%
	highest	South Oxfordshire District Council	63%	55%
Eastern	lowest	Tendring District Council	27%	37%
	highest	Three Rivers District Council	63%	52%

- Across the different regions, the range in recycling rate between the highest performing local authority and the lowest performing local authority varied between 16 and 41 percentage points.

- The regions with the widest ranges were Yorkshire and the Humber (41 percentage points), the North West and South East (both 40 percentage points), and the West Midlands (38 percentage points).

- The region with the smallest range was the North East, with a range of only 16 percentage points. In the North East, Stockton-on-Tees Borough Council had the lowest recycling rate in 2018/19 (26 per cent), and County Durham had the highest recycling rate (42 per cent). Notably, County Durham had a

lower proportion of organics waste (31 per cent) contributing to its recycling than Stockton-on-Tees Borough Council where organic waste formed 35 per cent of total recycling.

- A total of eight authorities had ‘household waste’ recycling rates greater than 60 per cent. Eighty-three authorities had recycling rates greater than 50 per cent.

- East Riding of Yorkshire Council had the highest ‘household waste’ recycling rate in England in 2018/19 at 65 per cent. Organic waste made up 49 per cent of their total household recycling tonnage. South Oxfordshire District Council, who had the second highest recycling rate, and Three Rivers District Council, who had the third highest recycling rate, both had ‘household waste’ recycling rates of roughly 63 per cent. The proportion of household recycling that was organic in South Oxfordshire District Council was 55 per cent; and for Three Rivers District Council, 52 per cent.

- East Riding of Yorkshire Council has been in the top three authorities with the highest ‘household waste’ recycling rates in England since 2015/16. South Oxfordshire District Council has been in the top three for the last five years.

- Over the last 5 years, South Oxfordshire District Council has had an average ‘household waste’ recycling rate of 65 per cent; East Riding of Yorkshire Council has had an average recycling rate of 64 per cent; and Three Rivers District Council has had an average recycling rate of 62 per cent.

- Three authorities have similar or higher five-year average recycling rates to Three Rivers District Council. These are Rochford District Council (64 per cent), Vale of White Horse District Council (64 per cent), and Surrey Heath Borough Council (62 per cent).

- In 2018/19, Tonbridge and Malling Borough Council had the highest proportion of organic/green waste comprising 73 per cent of their total recycled ‘household waste’. Their overall ‘household waste’ recycling rate was 42 per cent.

- Newham London Borough Council had the lowest ‘household waste’ recycling rate in England in 2018/19 at 17 per cent, with 23 per cent of the authority’s recycled ‘household waste’ being organic/green waste. The second lowest ‘household waste’ recycling rate was Barrow-in-Furness Borough Council (19 per cent; 41 per cent organic), and the third lowest was Westminster City Council (22 per cent; 5 per cent organic).

Table 5: Number of authorities in each region showing an increase in their recycling rate in 2018/19 compared to 2017/18

Region	Total number of authorities in region	Number of authorities with an increase of 0.1 percentage point or more in recycling rate in 2018/19	Percent of authorities in region with an increase of 0.1 percentage point or more	Number of authorities with an increase of 1.0 percentage point or more in recycling rate in 2018/10	Percent of authorities in region with an increase of 1.0 percentage point or more
North East	12	5	42%	8	24%
East Midlands	45	7	16%	3	25%
Yorkshire and the Humber	22	12	55%	4	9%
West Midlands	33	15	45%	7	32%
South West	30	19	63%	8	19%
North West	43	21	49%	8	16%
Eastern	50	21	42%	10	27%
London	37	21	57%	13	43%
South East	73	36	49%	18	25%
Total	**345**	**157**	**46%**	**79**	**23%**

- Table 5 shows the number of authorities in each region that had an increase in their 'household waste' recycling rate of 0.1 percentage points or higher in 2018/19 as compared to 2017/18. Figure 11 shows the geographic distribution of increases and decreases in recycling rates for each local authority by bands according to the size of the change.

- In total, 157 or 46 per cent of the 345 local authorities in England showed an increase of 0.1 percentage points or more in their 'household waste' recycling rates in 2018/19.

- Three regions had more than 50 per cent of local authorities show increases of 0.1 percentage points or greater in their 'household waste' recycling rate. In the South West, 63 per cent of authorities increased their recycling rate by 0.1 percentage points or more. In London, 57 per cent of authorities increased their recycling rate, and in Yorkshire and the Humber, 55 per cent.

- Five more regions had more than 40 per cent of local authorities show increases of 0.1 percentage points or greater. In the North West and South East, 49 per cent of authorities increased their 'household waste' recycling rate by 0.1 percentage points or more. In the West Midlands, 45 per cent of authorities, and in both the North East and Eastern region, 42 per cent of authorities.

- In 2018/19, the local authorities with the highest increase in ‘household waste’ recycling rates from 2017/18 were Lewes District Council, which increased by 13 percentage points from 27 per cent to 40 per cent; Torridge District Council, which increased by 10 percentage points from 41 per cent to 51 per cent; and Croydon London Borough Council, which increased by 9 percentage points from 38 per cent to 47 per cent.

Figure 10: Map of 'household waste' recycling rates for individual local authorities, England, 2018/19

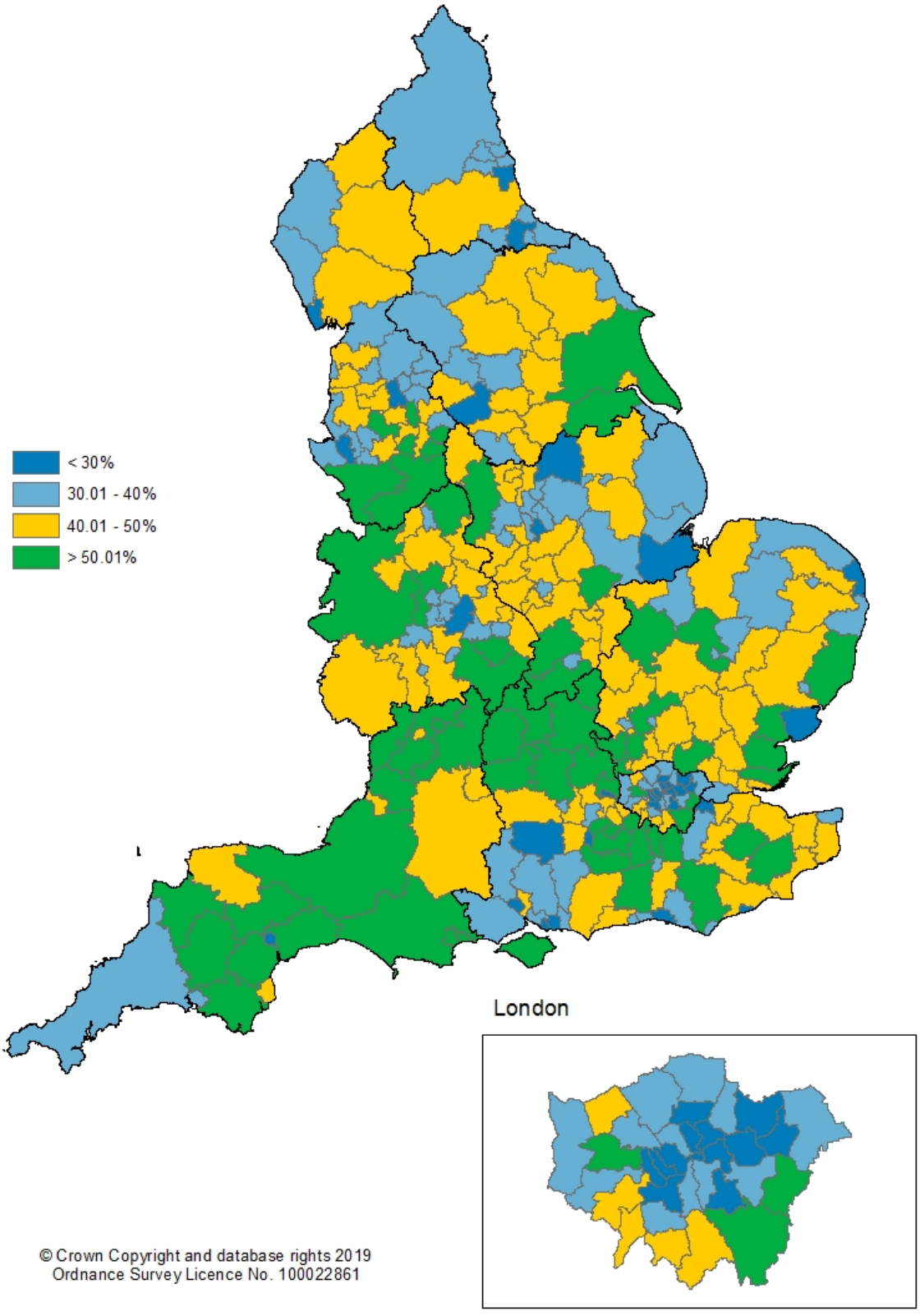
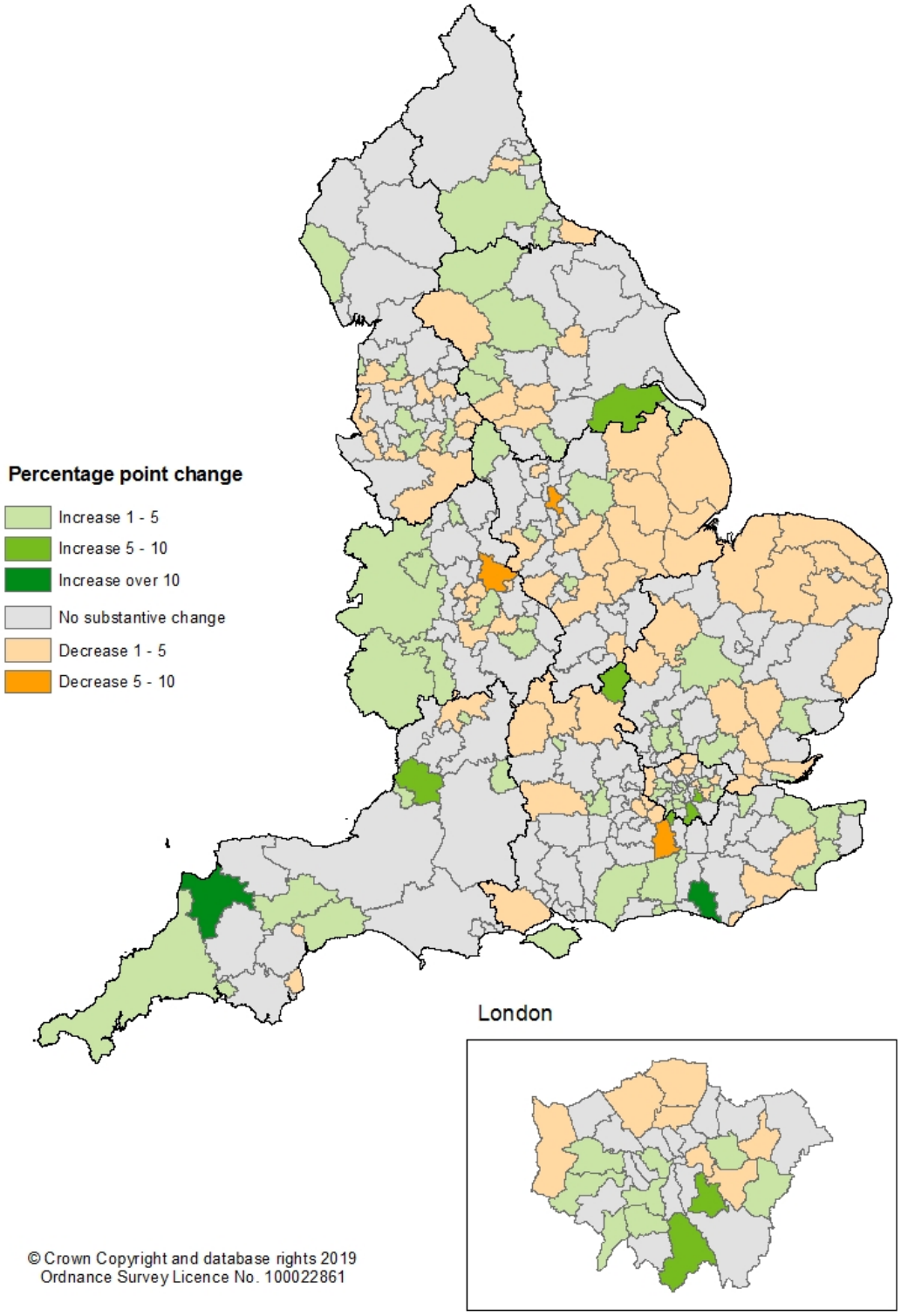


Figure 11: Map of change in 'household waste' recycling rates for individual local authorities, England, 2017/18 compared to 2018/19



Notes

Grey areas in this map indicate a local authority where the increase or decrease in the recycling rate was less than 1.0 percentage point.

6 DATA USES, FEEDBACK, REVISIONS POLICY, METHODOLOGY, GLOSSARY OF TERMS AND MEASURES, AND REFERENCES

6.1 Data Uses

Data on waste management is used to monitor policy effectiveness and to support policy development in the context of the recycling target set out in the Waste Framework Directive (2008/98/EC). The underlying data held in WasteDataFlow is also used extensively by local and central government, the waste industry, and the public. Data is reported by all local authorities, often from management information supplied by their waste management contractor.

Factors affecting household waste recycling range from individual household behaviours, the advice and collection services provided by local authorities, the cost of waste treatment and disposal, and to some extent, wider issues such as the state of the economy. Some quarterly waste data shows a clear seasonal fluctuation. For example, the generation of garden waste is highly seasonal, increasing sharply and pushing up recycling rates in the spring and summer months. For this reason, comparisons should be made with the same quarter in previous years or using full 12-month periods.

About 87 per cent of all waste managed by local authorities is ‘waste from households’ with the remainder coming from street cleaning, parks and grounds, business and construction. Only a small proportion of the total waste from businesses and construction are covered in these statistics, with most being managed privately.

6.2 Feedback

We welcome feedback on the data from all users, including how and why the data is used. This helps us to understand the value of the statistics to external users. Please e-mail the Waste Statistics team at WasteStatistics@defra.gov.uk.

6.3 Revisions Policy

Defra will provide information about any significant revisions made to information published in this statistics release and the associated datasets. Revisions could occur for a variety of reasons, including backdating to reflect methodological improvements or the finalisation of data from third parties that was unavailable or provisional at the time of publishing. The figures in this statistical release are taken from data reported by local authorities at a fixed time in October. Occasionally, local authorities request revisions after this point where it is generally not possible to take the changes into account without risking the delay of publication. These typically do not have a significant impact on the headline figures, particularly at an England level.

6.4 Methodology

Data from this release comes from a snapshot of the WasteDataFlow database taken in October 2019. WasteDataFlow is a UK-wide system managed by Defra in collaboration with Devolved Administration partners that is used to record the collection, treatment and disposal of local authority waste. First results using this database were produced for 2004/05 with earlier estimates of waste available from the Municipal Waste Management Surveys.

The tonnage of waste 'sent for reuse, recycling and composting' is that which is accepted by the re-processor. As such, it excludes any recycling rejects that occur during collection, sorting or further treatment. Waste diverted for recycling from the residual (or 'black bag waste') stream by further processing is included in the recycling tonnages.

For the 2017 release, a change in the methodology was made for the 'waste from households' recycling for 2016 to also include metal recovered and subsequently recycled after incineration of waste (IBA metal).

6.5 Inclusion of Metal Recovered and Recycled from Incinerator Bottom Ash (IBA Metal) in waste from households recycling

In December 2017, a change in how metal recovered and recycled after incineration of waste (IBA metal) is treated and reported for the 'waste from households' dataset only was introduced. The tonnage of IBA metal is now included within recycling rather than being reported as 'recovery'. The amount varies depending on the amount of residual waste being incinerated and the metal content of the residual waste.

Inclusion of IBA metal has been facilitated through the new Q100 reporting structure for waste treatment, which all local authorities have been using since April 2015. This has provided the opportunity for more complete recording of waste treatment, including outputs from incineration. Therefore estimates were produced for 2015, but it was not possible to backdate figures in a consistent manner prior to 2015 due to changes in the question structure and reporting that were introduced from April 2015 through Q100. The majority of local authorities are reporting more fully, but not all. Whilst reporting and associated quality assurance are developing and being refined, the figures need to be regarded as more indicative until it is fully-established and embedded. As such, the figures need to be taken as indicative estimates and this is why this has only been applied at the England level and not to individual local authorities.

This methodological change for IBA metal has been applied to the 'waste from households' measure only. It has been applied to data from April 2015—it is not possible to apply the change to data before then as the question structure used to

report waste treatment was different and, therefore, the reporting of IBA metal was not as consistent or as complete. At an overall England level, this change in methodology raised the recycling rate for 2016 by 0.7 percentage points (equivalent to 143 thousand tonnes). For 2015, the 'waste from households' recycling rate was increased by 0.4 percentage points (equivalent to 97 thousand tonnes). This is a slight underestimate for the impact on 2015 as data for January to March 2015 was collected using the old question structure and, as such, did not fully-capture IBA metal for this quarter; estimated to be around 23 thousand tonnes.

Overall, this change in methodology results in 'waste from household' recycling rates being slightly higher than where IBA metal would previously have been reported as 'recovery'.

There are no such methodological changes to the dataset for all local authority waste or 'household waste' recycling. There are no changes to the household (NI 192) household recycling figures that are reported for England, nor at a regional and individual local authority level where existing methodology and definitions have been retained.

6.6 November 2019 – Revisions to Historic Data

There were several revisions to the historic data used to compile these statistics and the accompanying datasets:

During the data quality assurance process, it was noticed that reporting errors by East Riding of Yorkshire Council had resulted in around 12 thousand tonnes of residual waste missing from incineration totals in Table 2 for both 2016/17 and 2017/18. This has been corrected in WasteDataFlow and in these statistics.

During the final preparation of last year's statistics, Vale of White Horse contacted Defra to advise that household recycling had been erroneously reported as non-household, resulting in a shortfall in their 'household waste' recycling rate of around 2 percentage points. This has been rectified in these statistics and datasets.

6.7 Question Structure for Treatment and Disposal Questions (Q100)

"Question 100" (Q100) has replaced the previous treatment questions. It was introduced on a voluntary basis from April 2014, and was used by all local authorities in England from April 2015.

Q100 provides a more flexible structure that has enabled local authorities to report a more complete and transparent representation of the more complex waste treatment practices that occur, which could not be accurately captured under the old question structure. It also provides the opportunity for local authorities to report, in more detail, the further treatment and disposal of certain waste types such as refuse-derived fuel (RSF), which would have previously been a final output. This is highly specific to the local authority and the facilities and practices used for treatment and disposal.

Q100 also allows for a more accurate and transparent reporting of recycling recovered from the residual stream, which is back-allocated by the waste disposal authority to its constituent waste collection authorities where there is arrangement to do this. This is done in a slightly different way, with some subtle changes to the calculation and apportionment. It also provides material-specific information to be recorded, which results in lower figures against 'other materials' for recycling as this is now recorded against specific materials such as glass, plastic, paper, and so on.

There are some subtle differences in the way the recycling calculations work in relation to the apportionment of waste as household/non-household or waste from household/non-waste from household depending on whether the local authority has provided the specific split at treatment; in the absence of this, the default factor based on the split at collection is applied. In many cases, local authorities have provided specific splits for 'household waste' but not the 'waste from household' splits. This can lead to some small differences in apportionment and trends when comparing data for 'household' and 'waste from household' levels.

Defra are monitoring and assessing the impact of the introduction of Q100 on data recording and subsequent reporting so that this is clear and consistent.

6.8 Data Quality Assurance

All local authorities provide data into WasteDataFlow. Several stages of data validation are carried out by the local authority submitting the data, the WasteDataFlow contractor and Defra, with input from the Environment Agency.

The WasteDataFlow contractors check each return for completeness and data consistency against key standardised validation checks. Data is checked against appropriate threshold values specified, which take into account the expected level of variance. There is an online validation process that compares the data for the current quarter against the data for the equivalent quarter in the previous year.

Once the data has been validated by the contractor, further validation checks are carried out by Defra, who may also refer some to the Environment Agency on any specific data queries raised, particularly related to the appropriate recording of treatment and facility sites. The Defra checks include trend and outlier analysis on key measures at an aggregate and individual local authority level. Details of the validation process are available on the WasteDataFlow website.

With the introduction of Q100, this provides scope for local authorities to report more fully on the treatment and final destination of waste. This is particularly the case for incineration of waste and subsequent outputs and their final treatment and disposal. Gathering such information can be challenging, especially where waste goes through multiple different sorting and treatment processes at different facilities. In most cases, local authorities are able to supply this information, but in some cases full final destination treatment is not given or is stated as 'unknown'. This may have a small impact on the final figures. Defra will continue to monitor this and work with local authorities to enhance data quality assurance, consistency, and completeness of reporting.

6.9 EU Recycling Target

Commission Decision 2011/753/EU allows a choice of four options and calculation methods for the calculation of the target to recycle at least 50% of household waste and similar by 2020. Each Member State must use the calculation method that corresponds to the re-use and recycling option that they have chosen to apply the target to. The UK currently applies the target to the third option: “the preparation for reuse and the recycling of household waste.” This means that the UK must use calculation method 3 set out in the Commission Decision, and use national data to report on the recycled amount of household waste. “Household waste” is defined in Article 1(1) of the Decision as “waste generated by households.”

More ambitious targets and other changes are being introduced through the Circular Economy Package.

6.10 National Statistics Accreditation

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

These statistics last underwent a full assessment [Assessment Report 173 Statistics on sustainability and the Environment and in England and the United Kingdom] against the Code of Practice for Statistics in 2012.

7 Glossary of Terms and Measures

‘Waste from Households’

The ‘waste from households’ measure was introduced to statistical publications by Defra in May 2014. It is used to construct a harmonised UK indicator for reporting recycling rates at a UK level on a calendar year basis, providing comparable calculations across each of the four UK countries. This provides a consistent approach with which to report household recycling rates at the UK level under the Waste Framework Directive (2008/98/EC).

‘Waste from households’ is a narrower version of the **‘household waste’** measure that was used previously. The difference is that ‘waste from households’ excludes local authority collected waste types not considered to have come directly from households, such as street bins, street sweepings, parks and grounds waste, and compost-like output (CLO) from Mechanical Biological Treatment (MBT) plants. As explained above under ‘Methodology’ and ‘Data Notes and Development’, we are introducing a change to the ‘waste from households’ recycling calculation to now include metal recovered after incineration (IBA metal). Further information on the difference has been published on the gov.uk website and is summarised in the table below.

Recycling (including composting and reuse)	Waste from Households recycling	Household waste recycling
from households and other premises similar to households, CA sites, Bring banks	Y	Y
from street bins	N	Y
from household-related parks and grounds	Community skips only	Y
from soil	N	Y
from rubble and plasterboard	N	N
from compost-like output from MBT plant	N	Y
from incineration bottom ash (IBA)	N	N
From metal recovered and recycled from incinerator bottom ash	Y*	N
other, from residual streams	Y	Y
recycling rejects	N	N

Residual waste	Waste from households residual	Household waste residual
from regular household collection	Y	Y
from civic amenity sites	Y	Y
from bulky waste	Y	Y
from other household waste	Y	Y
from street cleaning/sweeping	N	Y
from gully emptying	N	Y
from separately collected healthcare waste	N	Y
from asbestos waste	N	Y

Notes

* Revised to include IBA metal in 2017 and applied to data from April 2015.

We have continued to report the 'household waste' recycling measure in our annual publication on a financial year basis to maintain continuity with the existing data series and in order to meet the wider needs of users. However it is no longer reported in the quarterly releases on recycling, which will report the 'waste from households' measure only. Full data on 'household waste' is available and can be downloaded on the gov.uk website.

The local authority recycling rate is based on the **NI 192 National Indicator** recycling calculation. The National Indicator calculation has been widely used by local

authorities for many years for local strategic planning purposes, discussions with contractors and for benchmarking against other authorities and captures a broader scope of household waste than 'waste from households', e.g. it includes street sweepings and compost like output. This calculation will be made available as the NI 192 report on the WasteDataFlow portal and also on gov.uk website. This is reported on a financial year basis to meet the needs of local authorities.

Useful links

Scotland:	*https://www.sepa.org.uk/environment/waste/waste-data/waste-data-reporting/household-waste-data/*
Wales:	*https://statswales.gov.wales/Catalogue/Environment-and-Countryside/Waste-Management/Local-Authority-Municipal-Waste*
Northern Ireland:	*https://www.daera-ni.gov.uk/articles/northern-ireland-local-authority-collected-municipal-waste-management-statistics*
Eurostat	*http://ec.europa.eu/eurostat/web/waste*
WasteDataFlow Portal:	*http://www.wastedataflow.org/*

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